

My TUM Course Navigator

Designed around TUM students

Digital Product Creation

Conscious Design

The screenshot shows the TUM Course Navigator interface on a mobile device. At the top, there is a navigation bar with the TUM logo, 'Course Navigator', 'Overview', 'Explore', and a selected 'All Courses' tab. Below the navigation bar is a search bar with the placeholder 'Search for courses, professor.....'. Underneath the search bar are two filter sections: 'Basic Filter' and 'Advance Filter'. The 'Basic Filter' section contains two checkboxes: 'Only show courses of my curriculum' (checked) and 'Only show courses eligible for my graduate credit'. The 'Advance Filter' section includes dropdown menus for 'Module', 'Language', 'Offered semester', 'ECTS Credit', 'Lecture type', and 'Keyword', followed by a blue 'Apply Filter' button. To the right of these filters, a message states '398 Matching Results: Basic filter applied'. A list of courses is displayed, each with a course code, name, lecturer, ECTS, and a small icon. The first course listed is 'IN2346 Introduction to Deep Learning' by Prof. Gagneur, 5 ECTS. On the right side of the screen, there is a detailed view for 'IN2346 Introduction to Deep Learning' including 'Course Detail' (lecturer, credit, language, working load), 'Lecture Information' (organization, department), 'Content' (course description), and 'Previous knowledge expected' (passion for mathematics and machine learning). There are also 'Save' and 'View Full Details' buttons.



**“How did you find out
about this course?”**

“ ”



Difficult Course Discovery & Selection at TUM

01

Limited Course Discovery

Keyword search is unreliable, and interest-based search is unavailable

02

Dependency on Connection

Students rely on friends to discover courses and course information

03

Inefficient Course Selection

The process requires switching between multiple pages to check requirement

The Problem

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**“The goal is to Improve the
experience of course
discovery & selection”**

Define the Product

Understanding Our Users: Pain Points & Needs

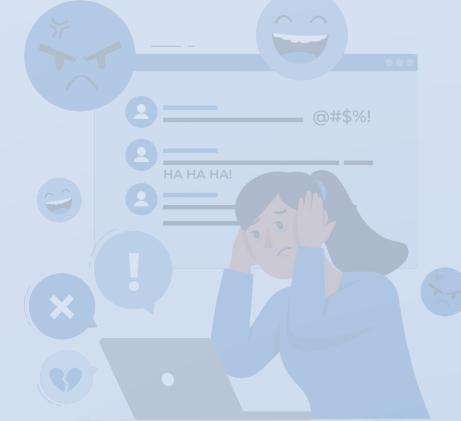
**Self-Directed
Academic
Students**



**Explorers &
Curriculum-
Breakers**



**Students
Facing Social
Challenges**



Define the Product

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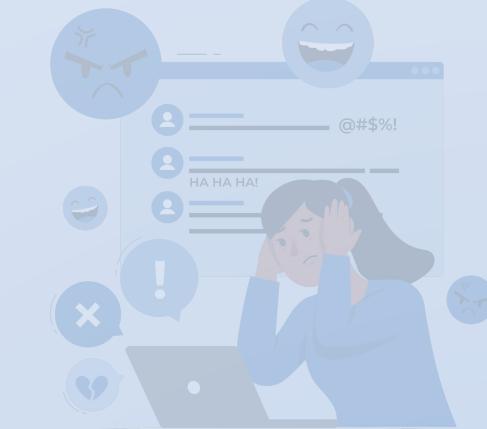
**Self-Directed
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Efficient course selection
Clear course description

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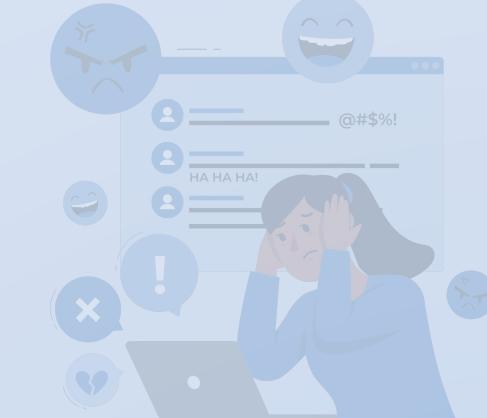
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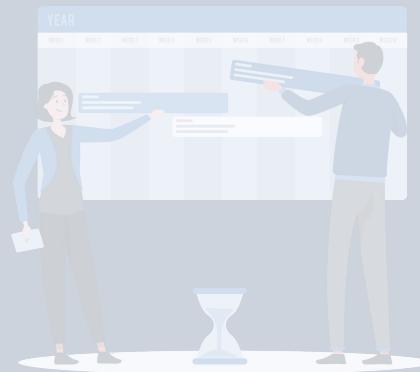
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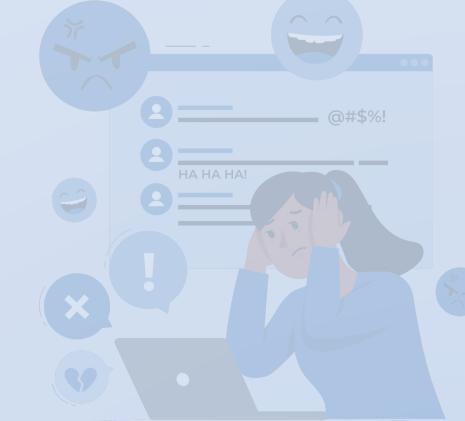
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Explorers &
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-Breakers

Discover interesting courses
across different study program

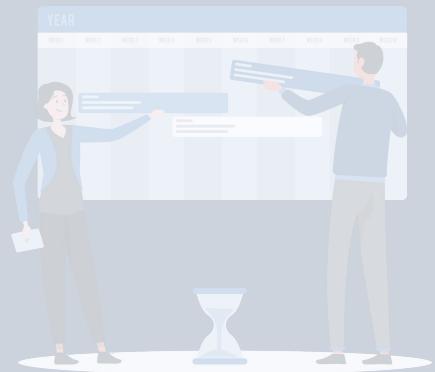
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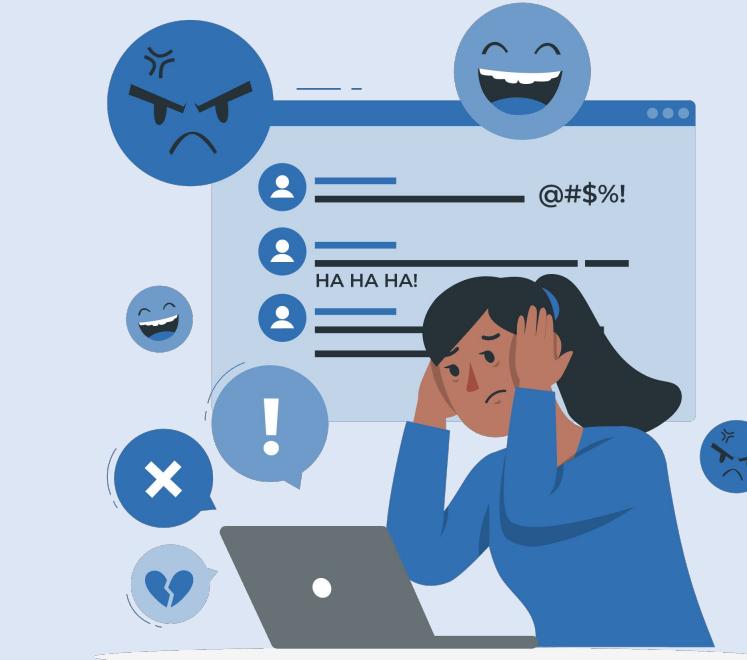
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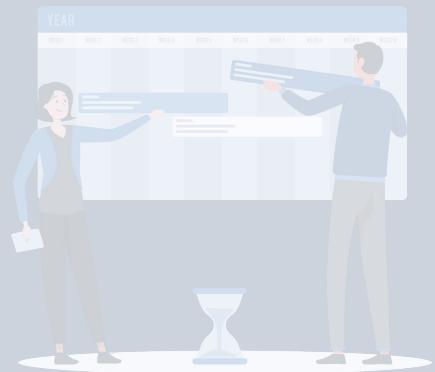
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Define the Product

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Students
Facing Social
Challenges

Prefer to avoid social interaction
and rely on anonymous guidance

Define the Product

Understanding Our Users: Pain Points & Needs

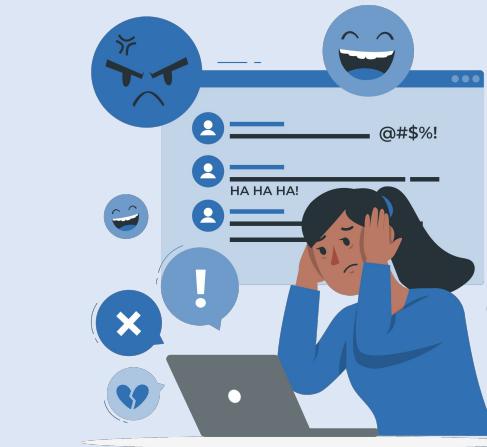
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The Solution

My TUM Course Navigator – A TUMonline extension to streamline course discovery, selection & planning

The screenshot displays the 'Course Navigator' section of the TUMonline platform. At the top, there's a navigation bar with the TUM logo, a language switcher (H EN), and a search bar containing the placeholder 'Search for courses, professor.....'. Below the search bar are two filter sections: 'Basic Filter' and 'Advance Filter', each with a 'Reset' button. The 'Basic Filter' section has two checkboxes: 'Only show courses of my curriculum' (checked) and 'Only show courses eligible for my graduate credit'. The 'Advance Filter' section includes dropdown menus for 'Module', 'Language', and 'Offered semester'. To the right, a main content area shows '398 Matching Results: Basic filter applied'. It lists three courses: 'Introduction to Deep Learning' (IN2346), 'Advanced Electronic Structure (CH3333)' (CH3333), and 'Advanced Programming and Numerical Methods' (0000001723). Each course card includes its code, name, lecturer, ECTS value, and a 'Save' icon. On the right side of the results, there's a detailed view for 'IN2346 Introduction to Deep Learning' showing student recommendations (1.1k), course details (lecture with integrated exercises, 5 ECTS, English, 8h/week), lecture information (Prof. Gagneur, Chair of visual computing, Department of Computer Science), and course content (Introduction to Computer Vision and history of Deep Learning, Machine learning Basics 1: linear classification, maximum likelihood, Machine learning basics 2: logistic regression, perceptron).

Course Navigator Overview Explore All Courses

Search for courses, professor.....

Basic Filter **Advance Filter**

Only show courses of my curriculum
 Only show courses eligible for my graduate credit

398 Matching Results: Basic filter applied

IN2346 Introduction to Deep Learning

1.1k students recommend this course

Course Detail

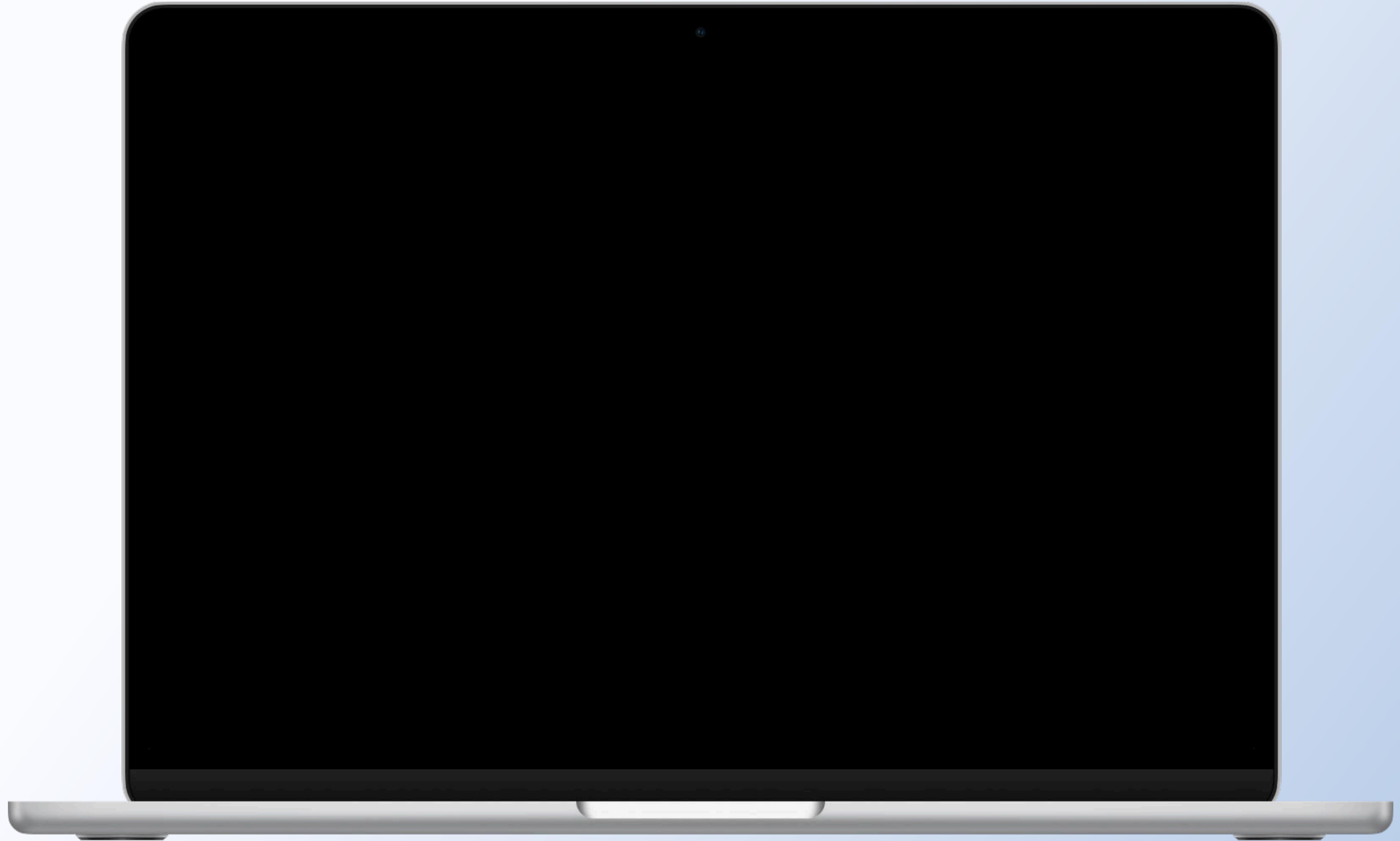
- Course type: lecture with integrated exercises
- Credit: 5 ECTS
- Language: English
- Working Load: 8h/ week

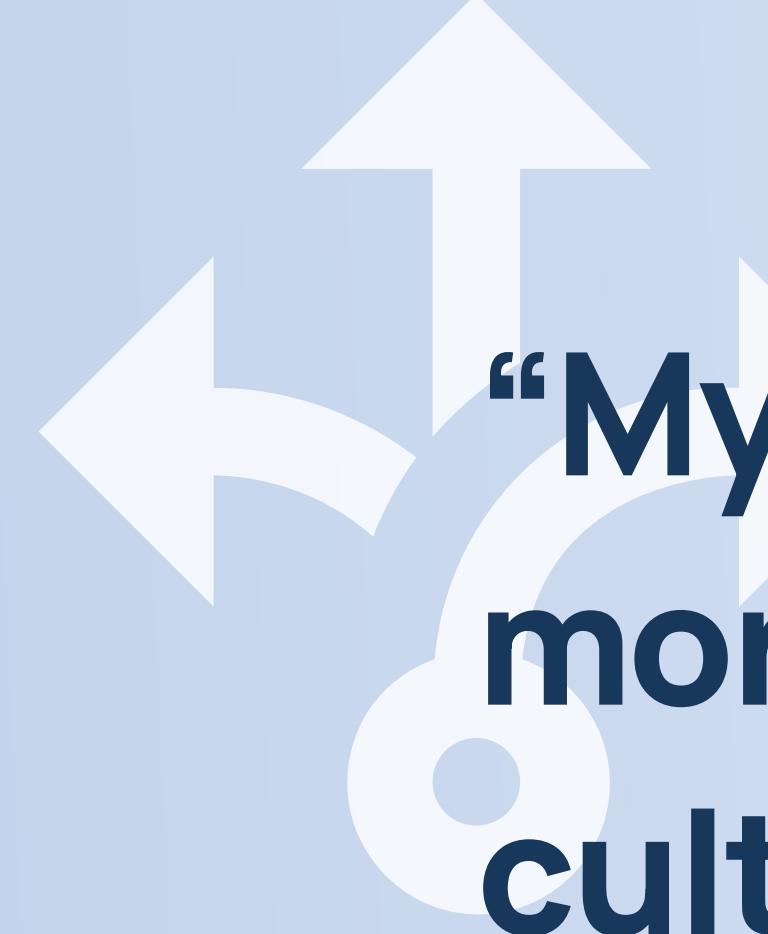
Lecture Information

- Lecturer: Prof. Gagneur
- Organization: Chair of visual computing
- Department: Department of Computer Science

Content

- Introduction to Computer Vision and history of Deep Learning.
- Machine learning Basics 1: linear classification, maximum likelihood
- Machine learning basics 2: logistic regression, perceptron





“My TUM Course Navigator supports a more inclusive and transparent study culture, empowers students to make informed academic decisions independently”

Conscious Design Decision



Situation:

An individual with past experiences of bullying interacts with your solution.



Situation:

A user is asked to share personal information they are uncomfortable disclosing.



Situation:

The introduction of your solution will have a negative effect on working conditions.

Conscious Design Decision

Anonymity

Allowing student anonymity helps ensure a
safe, respectful, and inclusive platform environment.

1.1k students recommend this course

Hands-On

Math-heavy

Programming

Good Workload

Applied

Anonymous Student

Computer Science B.Sc.

Do the Math Recap before taking this course :)

 Content Difficulty In-Depth

 Learning Style Balanced

 Workload 6-8hr

 Clarity of Instruction Varied

Conscious Design Decision

Controlled and Moderated Feedback

AI-moderated comments ensure feedback remains constructive,
protect instructors from personal attacks

Add Comments

Only share specific, constructive feedback to help improve the course or guide future students. Comments are automatically reviewed and will only be shared if they meet our guidelines.

The course is really well designed, with a strong focus on design thinking methods, user journey mapping, and a clear, design-oriented approach throughout. The lecturer is annoying.

Submit

Conscious Design Decision

Neutral Course Evaluation

With descriptive categories and scale, the system reduces competitive pressure on instructors and **avoids unfair course ranking**

Content Difficulty

Easy Moderate Intermediate In-Depth Expert-level

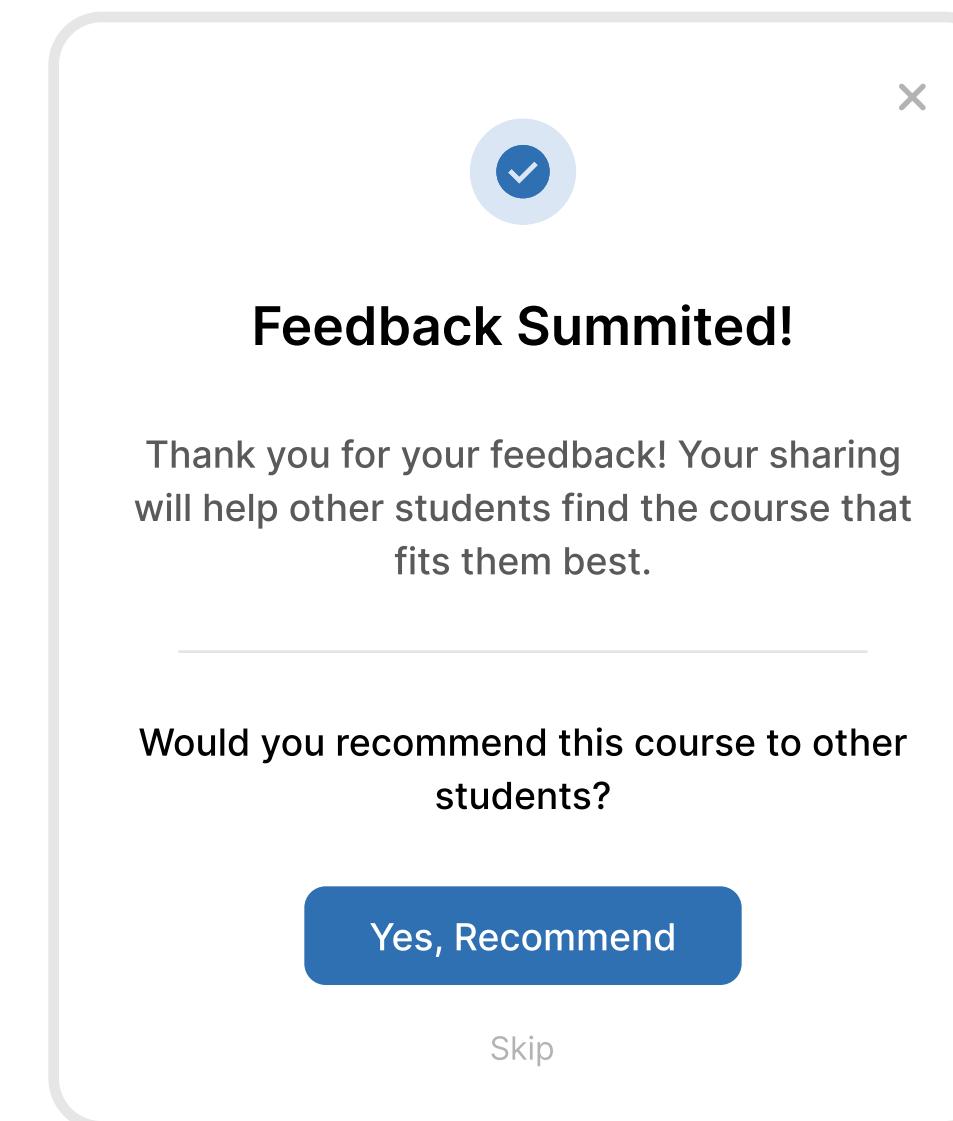
Learning Style

Lecture-based Explanation-focus Balanced Practice-focus Project-driven

Conscious Design Decision

Neutral Recommendation Options

Showing recommendation counts allows students to see how often courses are recommended while **avoiding negative judgments and direct comparisons**



Thank You!

Special Thanks to Lisi & Simon

